

CLAIMS

1 1. A method for creating a three-dimensional engraving,
2 comprising the steps of:
3 providing a three-dimensional solid having a specified shape and size;
4 scanning, into a processor driven and numerically controlled machining
5 center, data corresponding to a three-dimensional illustration;
6 projecting, into said solid, said three-dimensional illustration;
7 machining, in three-dimensional fashion, a three-dimensional surface
8 within said solid corresponding to said illustration; and
9 shading said three-dimensional surface of said solid according to
10 selected depths of machining.

1 2. The method as described in claim 1, further comprising the step
2 of surface preparing said three-dimensional solid prior to machining.

1 3. The method as described in claim 1, further comprising the step
2 of forming recessed surfaces on a non-machined surface of said solid.

1 4. The method as described in claim 1, further comprising the step
2 of securing fastener receiving mounting studs to a non-machined surface.

1 5. The method as described in claim 4, said step of securing studs
2 further comprising welding incorporating a capacitor discharge arcing process.

1 6. The method as described in claim 1, said step of projecting said
2 three-dimensional illustration further comprising assigning a depth of cut per
3 pixel distributed across a selected machining area.

1 7. The method as described in claim 3, further comprising the step
2 of locating said solid upon a machining center platform according to a location
3 of said recessed surfaces.

1 8. The method as described in claim 1, said step of machining
2 further comprising machining a roughing cut in a first direction, and
3 subsequently machining a finishing cut in a second direction.

1 9. The method as described in claim 1, said step of shading further
2 comprising immersing said machined three-dimensional solid within an oxide
3 bath.

1 10. The method as described in claim 9, further comprising the step
2 of applying a neutralizing solution to said solid following said step of
3 immersing.

1 11. The method as described in claim 10, said step of shading
2 further comprising abrading said three-dimensional surface and in order to
3 remove a darkened coating resulting from said oxide bath.

1 12. The method as described in claim 1, further comprising the step
2 of environmentally coating said machined solid.

1 13. The method as described in claim 12, said step of coating
2 further comprising applying a powderized and thermosetting acrylic urethane
3 material.

1 14. The method as described in claim 13, further comprising the
2 step of baking said powder coated solid in an oven.

1 15. The method as described in claim 1, said step of machining
2 further comprising engraving said solid.

1 16. The method as described in claim 6, said step of assigning a
2 depth of cut per machining area further comprising assigning 200 pixels per
3 square inch of area.

1 17. The method as described in claim 6, said step of assigning a
2 depth of cut further comprising establishing a scale of 0-255 projected into an
3 intermediate location of said solid.

1 18. A solid exhibiting a three-dimensional engraved surface,
2 according to the following steps:

3 scanning, into a processor driven and numerically controlled machining
4 center, data corresponding to a three-dimensional illustration;
5 projecting, into said solid, said three-dimensional illustration according
6 to a depth of cut per pixel distributed across a selected machining area;
7 machining, in three-dimensional fashion, a three-dimensional surface
8 within said solid corresponding to said illustration, said step of machining
9 further comprising at least machining a roughing cut in a first direction and
10 subsequently machining a finishing cut in a second direction;
11 immersing said machined solid into an oxide bath;
12 abrading a darkened coating formed by said oxide bath upon said three-
13 dimensional surface and in order to shade said solid according to individual
14 depths of cut;
15 applying a powderized and plasticized material upon said solid; and
16 baking said powder coated solid in an oven and in order to thermoset said
17 powderized material.

1 19. The solid as described in claim 18, further comprising the step
2 of forming recessed locating surface on a non-machined surface of said solid.

1 20. The solid as described in claim 18, further comprising the step
2 of securing fastener receiving mounting studs to a non-machined surface of
3 said solid according to a capacitor discharge arc welding process.